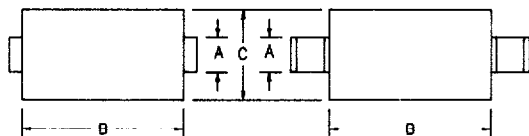


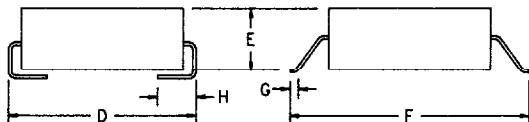
# Ultra Fast Recovery Rectifiers

## UFS305, 310, 315, 320



D0214AB

D0215AB



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.117	.123	2.21	2.97	
B	.260	.280	4.57	6.60	
C	.220	.245	3.94	5.58	
D	.307	.322	5.59	7.80	
E	.075	.095	1.90	2.41	
F	.380	.400	6.86	7.37	
G	.025	.040	.381	.762	
H	.030	.060	.760	1.52	

D

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
*UFS305	50V	50V
*UFS310	100V	100V
*UFS315	150V	150V
*UFS320	200V	200V

\*Add Suffix J For J Lead or G For Gull Wing Lead Configuration

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 50 to 200 Volts
- 3 Amp Current Rating
- $t_{RR}$  30 ns Max.

### Electrical Characteristics

Average forward current	$I_F(AV)$ 3.0 Amps	Square wave
Maximum surge current	$I_{FSM}$ 100 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Max peak forward voltage	$V_{FM}$ .95 Volts	$I_{FM} = 3.0A, T_J = 25^\circ C^*$
Max reverse recovery time	$t_{RR}$ 30 ns	1/2A, 1A, 1/4A, $T_J = 25^\circ C$
Typical reverse recovery time	$t_{RR}$ 18 ns	1/2A, 1A, 1/4A, $T_J = 25^\circ C$
Max peak reverse current	$I_{RM}$ 10 $\mu A$	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	$C_J$ 38 pF	$V_R = 10V, T_J = 25^\circ C$

\*Pulse test: Pulse width 300  $\mu sec$ , Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temperature range	$T_{STG}$	40°C to 175°C
Operating junction temp range	$T_J$	-40°C to 175°C
Weight		.008 ounces (0.22 grams) typical

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**6 Colorado**

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# UFS305, 310, 315, 320

Figure 1  
Typical Forward Characteristics

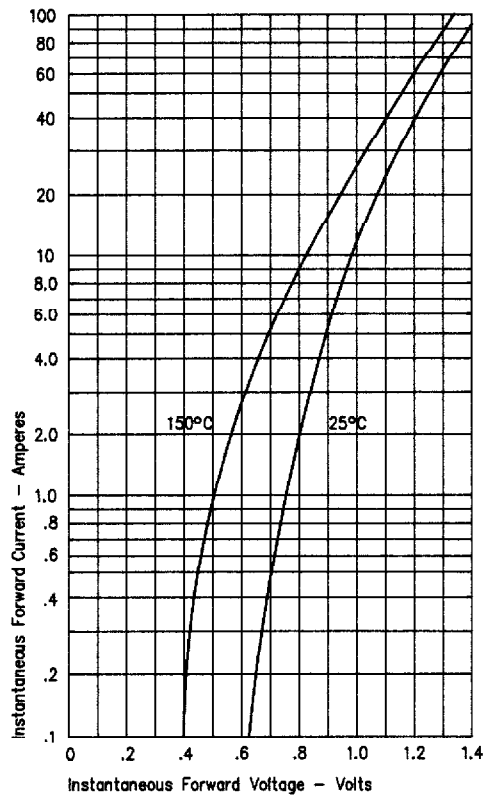


Figure 3  
Typical Junction Capacitance

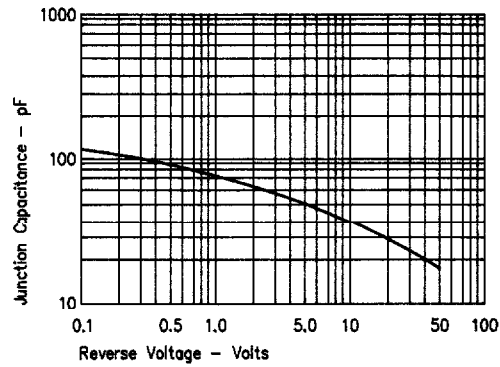


Figure 2  
Typical Reverse Characteristics

